

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of the Claims:**

Claim 1 (currently amended): A computer-implemented method for analyzing a circuit design comprising:

configuring an E-CAD tool to the circuit design using a configuration file;

running the E-CAD tool on the circuit design;

detecting violations of a specification using the E-CAD tool;

storing the violations to a violations file;

reading violations of the a-specification for the a-circuit design, wherein the step of reading violations comprises reading the violations file;

identifying symptoms of the violations of the circuit design specification based on the circuit design being analyzed;

identifying solutions to the violations of the circuit design specification based on the identified symptoms using data in a solutions database, wherein the solutions database includes a list containing one or more circuit design violations and one or more solutions, based on circuit characteristics, corresponding to the one or more circuit design violations contained in the list; and

proposing a proposed solution based on data stored in the solutions database;

receiving a selected solution;

re-configuring the E-CAD tool based on the selected solution; and

re-running the E-CAD tool on the circuit design.

Claims 2-5 (canceled).

Claim 6 (original): The method of claim 15, wherein the step of proposing the proposed solution comprises displaying at least one proposed solution on a display device, and wherein the step of receiving the selected solution comprises receiving an input signal from an input device.

Claim 7 (original): The method of claim 15, wherein the step of re-configuring comprises editing a configuration file of the E-CAD tool.

Claim 8 (original): The method of claim 1, further comprising storing data related to symptoms and solutions for the circuit configuration in the solutions database.

Claim 9 (currently amended): The method of claim 1, wherein the steps of reading violations, identifying symptoms, identifying solutions, and proposing the proposed solution comprise executing using a software configuration tool stored in a computer memory.

Claim 10 (currently amended): A computer system for analyzing signals in a circuit design stored in a memory, the system comprising:

a storage medium; and

a processor for executing a software program stored on the storage medium for analyzing a circuit design, the software comprising a set of instructions for:

configuring an E-CAD tool to the circuit design using a configuration file;

running the E-CAD tool on the circuit design;

detecting violations of a specification using the E-CAD tool;

storing the violations to a violations file;

reading violations of the a-specification for the a-circuit design, wherein the step of reading violations comprises reading the violations file;

identifying symptoms of the violations of the circuit design specification based on the circuit design being analyzed;

identifying solutions to the violations of the circuit design specification based on the identified symptoms using data in a solutions database, wherein the solutions database includes a list containing one or more circuit design violations and one or more solutions, based on circuit characteristics, corresponding to the one or more circuit design violations contained in the list; and

proposing a proposed solution based on data stored in the solutions database;

receiving a selected solution;

re-configuring the E-CAD tool based on the selected solution; and

re-running the E-CAD tool on the circuit design.

Claims 11-12 (canceled).

Claim 13 (currently amended): A computer system for analyzing signals in a circuit design stored in a memory, the system comprising:

a storage medium; and

a processor for executing a software program stored on the storage medium for analyzing a circuit design, the software comprising a set of instructions for:

configuring an E-CAD tool to the circuit design using a configuration file;

running the E-CAD tool on the circuit design;

detecting violations of a specification using the E-CAD tool;

storing the violations to a violations file;

reading violations of the specification for the circuit design, wherein the step of reading violations comprises reading the violations file;

identifying symptoms of the violations of the circuit design specification based on the circuit design being analyzed;

identifying solutions to the violations of the circuit design specification based on the identified symptoms using data in a solutions database, wherein the solutions database includes a list containing one or more circuit design violations and one or more solutions, based on circuit characteristics, corresponding to the one or more circuit design violations contained in the list; and

proposing a proposed solution based on data stored in the solutions database;

receiving a selected solution; and

editing the a-configuration file of the an-E-CAD tool based on the selected solution.

Claim 14 (original): The system of claim 13, wherein the step of proposing the proposed solution comprises displaying at least one proposed solution on a display device, and wherein the step of receiving a selected solution comprises receiving an input signal from an input device.

Claim 15 (currently amended): A tangible computer-readable medium having computer-executable instructions for performing a method for analyzing a computer representation of a circuit design, the method comprising:

configuring an E-CAD tool to the circuit design using a configuration file;

running the E-CAD tool on the circuit design;

detecting violations of a specification using the E-CAD tool;  
storing the violations to a violations file;  
reading violations of the a-specification for the a-circuit design, wherein the step of  
reading violations comprises reading the violations file;  
identifying symptoms of the violations of the circuit design specification based on the  
circuit design being analyzed;  
identifying solutions to the violations of the circuit design specification based on the  
identified symptoms using data in a solutions database, wherein the solutions database  
includes a list containing one or more circuit design violations and one or more solutions,  
based on circuit characteristics, corresponding to the one or more circuit design violations  
contained in the list; and  
proposing a proposed solution based on data stored in the solutions database;  
receiving a selected solution;  
re-configuring the E-CAD tool based on the selected solution; and  
re-running the E-CAD tool on the circuit design.

Claims 16-17 (canceled).

Claim 18 (currently amended): A tangible computer-readable medium having computer-executable instructions for performing a method for analyzing a computer representation of a circuit design, the method comprising:

configuring an E-CAD tool to the circuit design using a configuration file;  
running the E-CAD tool on the circuit design;  
detecting violations of a specification using the E-CAD tool;  
storing the violations to a violations file;  
reading violations of the specification for the circuit design, wherein the step of  
reading violations comprises reading the violations file;  
identifying symptoms of the violations of the circuit design specification based on the  
circuit design being analyzed;  
identifying solutions to the violations of the circuit design specification based on the  
identified symptoms using data in a solutions database, wherein the solutions database  
includes a list containing one or more circuit design violations and one or more solutions,  
based on circuit characteristics, corresponding to the one or more circuit design violations  
contained in the list;

proposing a proposed solution based on data stored in the solutions database;  
receiving a selected solution; and  
editing the ~~a~~-configuration file of the ~~an~~-E-CAD tool based on the selected solution.

Claim 19 (original): The medium of claim 18, wherein the step of proposing the proposed solution comprises displaying at least one proposed solution on a display device, and wherein the step of receiving a selected solution comprises receiving an input signal from an input device.

Claim 20 (original): The medium of claim 18, the method further comprising re-running the E-CAD tool on the circuit design.